

Mr Neil Savery
Chief Executive Officer
Australian Building Codes Board
GPO Box 2013
CANBERRA ACT 2601

GEA RESPONSE TO THE SCOPING STUDY ENERGY EFFICIENCY: NCC 2022 AND BEYOND

Dear Mr Savery

The members and associates of Gas Energy Australia (GEA) welcome the opportunity to provide comments in response to the consultation on the Australian Building Codes Board's (ABCB) Scoping Study, *Energy efficiency: NCC 2022 and beyond*.

As you may be aware, GEA is the national peak body which represents the bulk of the downstream alternative gas fuels industry, which covers Liquefied Petroleum Gas (LPG), Liquefied Natural Gas (LNG) and Compressed Natural Gas (CNG). The industry comprises major companies and small to medium businesses in the gas fuels supply chain including producers, refiners, distributors, transporters, retailers, vehicle manufacturers, equipment manufacturers and suppliers, installers, educators and consultants.

GEA supports changes to the energy efficiency provisions of the National Construction Code (NCC) 2022 to reduce energy use by, and greenhouse gas emissions from, Australia's residential buildings, provided they are fuel and technology neutral and do not impose costs on households that exceed the benefits.

GEA welcomes the commitment by the ABCB to remain technology and fuel neutral when changing the NCC. Throughout the National Energy Productivity Plan (NEPP) Trajectory for Low Energy Buildings consultation process, GEA and other gas industry associations highlighted the benefits of remaining fuel and technology neutral, and preserving consumer choice.

In regards to the two options proposed by the ABCB to improve the energy efficiency requirements of residential buildings, GEA supports Option 2 which would more closely align to the approach suggested in the Trajectory for NCC 2022 and would not force the incorporation of on-site renewables to the same extent as Option 1.

Australia already has the highest level of residential rooftop solar installation in the world, with 21.6% of all houses (excluding apartments) having a photo voltaic (PV) system installed¹. With solar installation rates forecast to grow steadily, and forecast growth rates particularly high for commercial PV systems and PV systems combined with battery storage², there is no need to force greater uptake. Indeed, what is needed is greater consideration of the changing demand on the electricity grid as a

¹ Australian PV Institute/UNSW, *Solar Trends Report for Solar Citizens*, Pg. 2, 2018 http://apvi.org.au/wp-content/uploads/2018/12/Solar-Trends-Report-for-Solar-Citizens-FINAL_11-12-18_2_logos.pdf

² Australian Energy market Operator, ROOFTOP PV AND BATTERY STORAGE Key Insights, <https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Planning-and-forecasting/NEM-Electricity-Demand-Forecasts/PV-and-storage>

result of the increasing penetration of solar PV systems, rather than mandating the installation of solar PV systems on new buildings.

Also, requirements to install on site renewable generation, as part of Option 1, do not account for potential barriers to such installations, for example building orientation, shading and limitations of apartment buildings and townhouses. As mentioned in the Scoping Study, if the NCC 2022 adopts Option 2, the introduction of on-site renewable generation requirements into the NCC would be more feasible in later iterations of the NCC. That is when renewable generation technology has advanced, grid impacts of the increased solar penetration are better understood and industry's understanding of the pathway which NCC energy efficiency improvements related to on-site generation are likely to progress has improved.

GEA considers that there also are many alternate ways to offset emissions from a home's energy usage and there should be consideration of the ability of gas use to be offset by on site renewable generation. Consideration must also be given to the impacts of the use of carbon offset gas fuels such as Green LPG in the energy usage budget, along with renewable gases such as hydrogen and biogas as they become more widely available into the future. For example, individuals are currently able to offset their carbon emissions associated with the use of LPG in their home through the purchase of Green LPG, reducing the impact of LPG consumption on the environment through carbon offsetting, which is currently practised by Origin Energy.

GEA accepts that batteries and solar/renewables are included in the scope because such technologies can affect building design. But so can other forms of renewable generation technology such as biogas. For example, biodigesters in the home, which are becoming increasingly available and economical, should also be included. Developing sustainable solutions like using biodigesters to recycle waste are essential for homes which do not have the ability to integrate solar PV into their building design, but want to maintain the ability to have net zero energy use and utilise gas appliances into the future.

GEA considers that Option 2, which would not mandate on-site renewables and would allow for a moderate amount of annual energy use for regulated building services, represents achievable change to NCC 2022 affecting the residential building sector within the time frame. GEA supports Option 2's approach to increasing the energy performance of Australia's residential buildings. However, it must be fuel and technology neutral and consumers must continue to have the ability to choose whichever set of fuels and appliances best fits their needs while still complying with the NCC.

Should you have any questions relating to this submission please do not hesitate to contact Melissa Dimovski at mdimovski@gasenergyaustralia.asn.au.

For your consideration.

A handwritten signature in black ink, appearing to read "John Griffiths", with a horizontal line drawn through it.

John Griffiths
Chief Executive Officer
Gas Energy Australia